

SHRINK WIDTH TO FIT may change the string's aspect ratio and operates on its width (height is not affected). SHRINK HEIGHT TO FIT may shrink the string's height to fit inside the 3-D text page's height when the string's height exceeds the 3-D text page's height. This parameter changes the string's aspect ratio and operates on its height (width is not affected). SIZE TO FIT may change the string's width and height to always be the same as the 3-D text page's width and height. SIZE TO FIT may change the string's aspect ratio and may operate on its width and height.

[0183] GROW HEIGHT SHRINK WIDTH may change the string's height to always fit inside the 3-D text page's height by shrinking or expanding the string's height (aspect ratio not changed). GROW HEIGHT SHRINK WIDTH may also shrink the string's width to fit inside the 3-D text page's width when the string's width exceeds the 3-D text page's width (will change aspect ratio). GROW WIDTH SHRINK HEIGHT may change the string's width to always fit inside the 3-D text page's width shrinking or expanding the string's width (aspect ratio not changed). GROW WIDTH SHRINK HEIGHT may also shrink the string's height to fit inside the 3-D text page's height when the string's height exceeds the 3-D text page's height. GROW WIDTH SHRINK HEIGHT may also change string's aspect ratio and may operate on its width and height (will change aspect ratio).

[0184] SetClipping may enable or disable text clipping against the boundaries defined by the text page. When enabled, any portion of a character or characters that may reside outside of the boundaries of the 3-D text page may be removed and may not be displayed. SetName may set the name of the 3-D text object. SetFont may be used to assign a font resource that may be used when creating the text string. SetFontSize may be used to set the font's size by defining its height in an appropriate coordinate system. SetColor may be used to set the string's color information by specifying separate red, green, blue and alpha color values.

[0185] SetLineSpacing may be used to set the additional line spacing that is used between lines within the string. SetSize may be used to set the string's width, height and depth. SetString may be used to assign a text string to be drawn. GetRawExtents may be used to calculate the width, height and depth of the text string's 3D geometry using current property settings. SetCharacterScale may be used to assign a scaling value to be applied to each character's size. This can be used to change the character's aspect ratio providing squash and stretch capabilities. SetCharacterSpacing may be used to set the character spacing for the space used to separate each character in the text string. This value is added to the character's width defined in the font resource. SetNonProportionalWidth may be used to adjust the character width for use in non-proportional spacing. This value is added to the Font's default character width to make a new width that is applied to each character when non-proportional spacing is enabled.

[0186] SetNonProportionalWidthType may be used to sets the type of calculations used to determine the non-proportional width using the non-proportional width value. There are number of different Width Types that may be used with the present invention. FONT WIDTH PERCENTAGE interprets the Non-Proportional Width property to be a percentage of the font's max character width. The resulting value is the new character width used in non-proportional spacing.

VALUE interprets the Non-Proportional Width property to be the actually width value used in non-proportional spacing. FONT WIDTH OFFSET interprets the Non-Proportional Width property to be added to the font's max character width. The resulting sum is the new character width used in non-proportional spacing.

[0187] EnableNonProportionalSpacing may be used to indicate that a conversion from a proportional font into a non-proportional font is desired. SetStringPosition may be used to set a string's position in the 3-D text page. When the justification is set to "NONE", this value sets the string's position inside the 3-D text page. Using this feature along with clipping may be used to create a marquee sign where text is scrolled across an area.

[0188] Methods in the present invention may be used to manipulate font properties. For instance, GetFont may be invoked to determine the current font resource (font file being applied) being used. SetFont may be used to assign a font resource that will be used when creating a text string. GetFontSize may be used to retrieve a font's size. SetFontSize may be used to set the font's size by defining its height.

[0189] Methods in the present invention may also be used to manipulate text string properties. For instance, getColor may be used to retrieve the string's color information separated in red, green, blue and alpha values. SetColor may be used to set the string's color information by specifying separate red, green, blue and alpha color values. GetLineSpacing may be used to retrieves additional line spacing that is added to the font's specified line spacing. The value is used to increase or decrease spacing between each line of the string. SetLineSpacing may be used to set the additional line spacing that is used between lines within the string.

[0190] GetScale may be used to get the current scaling value being applied to the text string in the 3-D text object. SetScale may be used to set the scaling value to be applied to the text string's size. GetSize may be used to calculate the string's width, height and depth using the current attribute values (i.e. font size, line spacing, etc.). SetSize may be used to set the string's width, height and depth.

[0191] GetString may be used to retrieve a pointer to the buffer containing the characters in the string to be drawn. SetString assigns a text string to be drawn. GetRawExtents may be used to set the string's width, height and depth.

[0192] The following commands, provided for illustrative purposes, may be used as part of character typesetting operations performed on the gaming machine. GetCharacterScale may be used to retrieve the current scaling value being applied to each character's size in the string. SetCharacterScale may be used to assign a scaling value to be applied to each character's size. GetCharacterSpacing may be used to retrieve the character spacing. It may be used to separate each character in the string. SetCharacterSpacing may be used to set the character spacing for the space used to separate each character in the string. This value may be added to the character's width defined in the font resource.

[0193] GetCharacterWidth may be used to retrieve the character width used in non-proportional spacing. This value is added to the Font's default character width to modify the width applied to each character. SetCharacterWidth may be used to adjust the character width for use in non-proportional spacing. This value is added to the Font's default